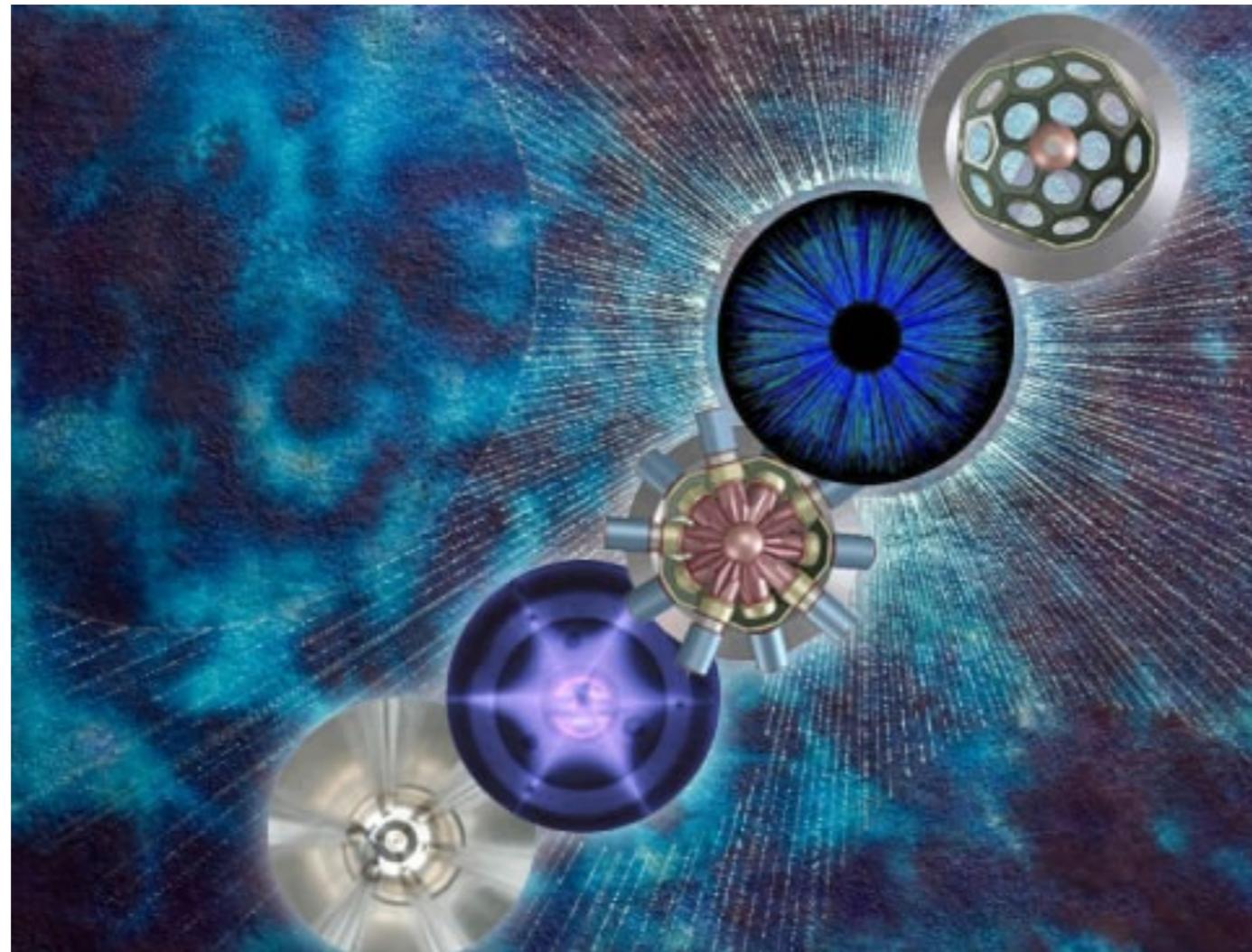


Nuclear Science Division Staff Meeting - 01/26/2021



Agenda

NSD Staff Meeting



📅 Tuesday 26 Jan 2021, 12:00 → 13:00 US/Pacific

Description Zoom Meeting <https://lbnl.zoom.us/j/792948648>
Meeting ID: 792 948 648
Password: 334258
Find your local number: <https://lbnl.zoom.us/u/aceAbJt04R>

12:00 → 12:05 **Announcement**

Speakers: Mateusz Ploskon, Xin Dong

🕒 5m



12:05 → 12:15 **Safety**

Speaker: Jeff Bramble (NSD)

🕒 10m



12:15 → 12:30 **Diversity, Equity and Inclusion**

Speakers: Ernst Sichtermann, Heather Crawford, Mark Bandstra, Tom Gallant (LBNL)

🕒 15m



12:30 → 12:50 **Pion Condensation in the Early Universe at Nonvanishing Lepton Flavor Asymmetry**

Speaker: Volodymyr Vovchenko

🕒 20m



Upcoming Events

HIT Seminar

Zoom: <https://lbnl.zoom.us/j/99103329080?pwd=ZmRRdm4xeUpRS3RJRFpKTEVTODF2QT09>

Meeting ID: 991 0332 9080 Passcode: 396264

January 26 @ 1:30pm – 2:30pm

Speaker: Yi Chen (MIT)

Title: Constraining the jet transport coefficient q -hat in heavy-ion collisions with Bayesian analysis

February 2 @ 3:30pm - 4:30pm

Speaker: Huey-Wen Lin (MSU)

Title: Quasi-PDF on Lattice

Nuclear Theory Seminar

February 3 @ 1:00pm – 2:00pm

Speaker: Varun Vaidya (MIT)

Title: TBD

Zoom: <https://lbnl.zoom.us/j/91941520781?pwd=S29FN2w1NElycVhEbW56SnBFN1lzZz09>

Meeting ID: 919 4152 0781 Passcode: 596153

INPA Seminar

January 29 @ 12:00pm - 1:00pm

Speaker: Joseph DeRose (UC Santa Cruz)

Title: Models of the Non-Linear Universe for Precision Cosmology

Zoom: <https://lbnl.zoom.us/j/96158079387?pwd=aXY5QStNZUpUbUpUYUpTZm5SbUYyZz09>

Meeting ID: 961 5807 9387 Passcode: 363617

Upcoming Events

Physics Special RPM - Berkeley Cosmology Seminar

January 26 @ 1:10pm – 2:10pm

Speaker: Noah Weaverdyck (University of Michigan)

Title: Controlling Systematics in Large-Scale Structure Surveys

Zoom: <https://lbnl.zoom.us/j/91399869562> Meeting ID: 913 9986 9562

January 26 @ 4:00pm – 5:00pm

Speaker: Vinicius Mikuni (University of Zurich)

Title: Machine learning as a tool for Standard Model measurements

Zoom: <https://lbnl.zoom.us/j/95906405235> Meeting ID: 959 0640 5235

January 27 @ 3:00pm – 4:00pm

Speaker: Elliott Reynolds (University of Birmingham)

Title: Searching for New Physics using the Higgs Boson and Machine Learning

Zoom: <https://lbnl.zoom.us/j/97582336673> Meeting ID: 975 8233 6673

January 28 @ 4:00pm – 5:00pm

Speaker: Mariel Pettee (Yale University)

Title: The Search for VH ($V \rightarrow \text{Leptons}$, $H \rightarrow \tau\tau$) with the ATLAS Experiment in Run 2

Zoom: <https://lbnl.zoom.us/j/95547677630> Meeting ID: 955 4767 7630

February 2 @ 1:10pm – 2:10pm

Speaker: Anton Beleato Lizancos (University of Cambridge)

Title: Fundamental Physics with CMB Lensing and Delensing: the Good, the Bad and the Systematics

Zoom: <https://lbnl.zoom.us/j/95317538825> Meeting ID: 953 1753 8825

February 2 @ 4:00pm – 5:00pm

Speaker: Nitish Nayak (University of California, Irvine)

Title: Ghostbusters : Estimation of Neutrino Oscillation Parameters by the NOvA Experiment

Zoom: <https://lbnl.zoom.us/j/95906405235> Meeting ID: 959 0640 5235

LDRD

Please check the email sent by Sandra Ritterbusch on behalf of Alan Poon on January 4th

Physical Science Area Initiative:

- i. new scientific opportunities in particle physics and cosmology;
- ii. new opportunities in nuclear science;
- iii. advanced accelerator systems for colliders and other applications including high-power lasers;
- iv. novel technical concepts and capabilities: especially microelectronics, semiconductor detectors, quantum enabled technology, superconducting magnets;
- v. novel computing capabilities including AI/ML applied to particle physics, cosmology, nuclear science and accelerators;
- vi. new opportunities in fusion energy sciences;
- vii. leveraging LBNL capabilities to address national & homeland security mission needs, including monoenergetic photon sources, advanced neutron-based active interrogation concepts, and advanced radiation detection and imaging algorithms.

An important priority for PSA is to establish the technical and theoretical capabilities for Berkeley Lab leadership roles in the scientific opportunities identified in the Nuclear Physics Long Range Plan and other strategic planning exercises in the community.

An Area-wide priority for FY22-23 is to support innovative ideas in instrumentation, with an emphasis on detector and readout R&D that could enable scientific opportunities in more than one discipline, with participation of multiple Divisions to create synergies across and outside the Area. Proposals may also include needed investments in technical infrastructure in support of instrumentation R&D.

Timeline:

up to February 12:

- Pls discuss ideas with the program head
- Pls schedule appointments with Laura Stine (lstine@lbl.gov) to discuss budget

Wednesday, February 17, 9:00-12:00 PST LDRD presentations via ZOOM

<https://lbl.zoom.us/j/91991085980?pwd=OVhvY1NGTnJyaDdVL0UzTGQ1VlJpUT09>

Friday, March 19:

- proposals submitted to the online system.

Monday, March 22:**

- the Lab will lock the submissions website for further processing.

Next Staff Meeting

Next NSD Staff Meeting: February 9, 12pm

NSD Staff Meeting

Tuesday 9 Feb 2021, 12:00 → 13:00 US/Pacific

12:00 → 12:05 **Announcement**

Speakers: Mateusz Ploskon, Xin Dong

⌚ 5m

12:05 → 12:15 **Safety**

Speaker: Jeff Bramble (NSD)

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12:15 → 12:30 **Diversity, Equity and Inclusion**

Speakers: Ernst Sichtermann, Heather Crawford, Mark Bandstra, Tom Gallant (LBNL)

⌚ 15m

12:30 → 12:50 **KATRIN**

Speaker: Bjoern Lehnert

⌚ 20m

Scientific contributions: please contact

Xin Dong (xdong@lbl.gov) or Mateusz Ploskon (mploskon@lbl.gov)